Nanopublication — Computational Image Analysis - AQC0608

by Arnaud Quercy · Ab Major - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0608

> The artwork Ab Major [1] - Research on Harmony - Variation 1 (AQC0608) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-08. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 2598x3248 pixels. Analysis date: 2026-02-08.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		3F505F	22.5	blue	grayish purple
2		2F404E	22.0	blue	grayish purple
3		526271	16.5	blue-violet	grayish purple
4		8980AE	9.1	violet	dusty mauve
5		6B7985	8.1	blue-violet	grayish purple
6		29204A	6.7	violet	very dark purple
7		6D5B98	6.0	violet	dusty mauve
8		A3A6C0	5.0	violet	steel gray
9		C53219	2.5	red-orange	firebrick
10		D0DAE2	1.6	blue	gainsboro
11		FAF2E8	0.3	yellow-orange	white [Accent]

Color Families:

Family	%
blue	46.1
violet	26.8
blue-violet	24.6
red-orange	2.5
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
FAF2E8	yellow-orange	white	6.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.147
Mean Local Roughness	0.062
Roughness Uniformity	0.041
Edge Density	0.291
Mean Gradient Magnitude	0.462
Gradient Variance	0.183
Gradient Smoothness	0.075
Directional Coherence	0.008
Pattern Complexity	0.162
Pattern Repetition	1.0
Detail Frequency Ratio	0.718
Spatial Variation	0.08
Texture Consistency	0.62

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.36
Brightness Variance	0.147
Brightness Uniformity	0.591
Brightness Skewness	1.134
Brightness Entropy	7.097
Rms Contrast	0.147
Michelson Contrast	1.0
Weber Contrast	0.627
Mean Local Contrast	0.07
Contrast Uniformity	0.359
Dynamic Range	1.0
Effective Dynamic Range	0.467
Shadow Percentage	50.455
Midtone Percentage	45.254
Highlight Percentage	4.291
Shadow Clipping	0.0
Highlight Clipping	0.02
Tonal Balance	0.0
Fine Contrast	0.031
Medium Contrast	0.084
Coarse Contrast	0.081
Multiscale Contrast Ratio	0.389
Edge Contrast	0.462
Contrast Clustering	0.38

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.709
Color Clustering	0.457
Color Transition Smoothness	0.0
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.007

Metric	Value
Mean Saturation	0.349
Saturation Variance	0.024
Low Saturation Ratio	0.345
Medium Saturation Ratio	0.62
High Saturation Ratio	0.035
Saturation Clustering	0.997
Hue Concentration	0.867
Complementary Balance	0.015
Analogous Dominance	0.966
Temperature Bias	-0.68

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

[1] Arnaud Quercy (2024). Ab Major - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0608.html

[2] Quercy, A. (2024). Ab Major - Research on Harmony - Variation 1 - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony-variation-1_6so.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/10/mmids-cmp-2025-computational-image-analysis-standard-dg1.html

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

1a674392787b51dc386ae59225df6f2ea94fc41db86a263320b-dea248f778c5e

Artist	Arnaud Quercy
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